

**CITY OF SAN DIEGO  
APPROVED MATERIALS LIST  
FOR MUNICIPAL SEWER**

<b>SUBJECT</b>	<b>SPEC. REF.</b>	<b>MANUFACTURER (Series/Model No.)</b>	<b>ADDITIONAL REQUIREMENTS</b>
<b>H. Sewer Pipe</b>			
(1) Vitrified Clay Extra Strength Pipe and Fittings	*207-8 ASTM C 780	Pacific Clay Pipe Gladdin and McBean Mission Clay	Plain End & Bell and Spigot Type Pipe
(2) PVC Sewer Pipe and Fittings – Gasket Joints, 4 thru 15 inches Diameter	*207-17 ASTM D 3034 SDR-35	J-M Certainteed Carlton Pacific Western Plastics Vinyltech Diamond Plastics Corp.	Green Bell
(3) PVC Sewer Pipe and Fittings – Gasket Joints, 18 thru 30 inches Diameter	*207-17 ASTM F 679 “T-1” only	J-M Carlton Certainteed Pacific Western Plastics	
<b>I. Sewer Laterals</b>			
(1) Vitrified Clay	*207-8	Gladdin & McBean Mission Clay	Plain End & Bell and Spigot Type Pipe
(2) PVC	*207-17 ASTM D 2751	J-M Certainteed Pacific Western Plastics Vinyltech	
(3) ABS	*207-15 ASTM D 2751	Colby Standard Plastics	
<b>J. Sewer Fittings</b>			
(1) Vitrified Clay	*207-8	Gladdin & McBean Mission Clay	Plain End, Bell and Spigot Type Pipe
(2) PVC	*207-17	Vassallo Multi-Fitting G.P.K. J-M	
(3) ABS	*207-15	U-Brand	
<b>K. Pre-Cast Manhole Bases</b>	ASTM C 478	Mar-Con Products	
<b>L. Sewer Rehabilitation Products<sup>2</sup></b>			
(1) PE Solid Wall	500-1.3	Chevron Plexco Phillip Driscopipe	Reno, NV plant Watsonville plant
(2) Cured-In-Place	500-1.4	Inliner-Fabric tube: polyester felt, Resin: Dow Derakane 411 vinylester  Insituform-Fabric tube: Polyester felt Resin #1: Shell Epon 9215 epoxy Resin #2: Interplastics VE8319 vinylester	Houston, TX plant  Memphis, TN plant
(3) Profiled PVC	500-1.5	Danby	Toronto, Canada plant
(4) Deformed Solid Wall PE	500-1.7	Hydroconduit Uliner – Novacor resin	Roaring Springs, TX plant Houston, TX plant

(5) CCFRPM	500-1.8	Hobas	Birmingham, NY plant Waco, TX plant
(6) Folded Solid Wall PVC	500-1.10	American Plastics AMLiner Insituform Nupipe	Gepps Gross, South Australia Plant
(7) Machine Spiral Wound PVC	500-1.13	Rib Loc	
(8) MultiPlexx Liner System, Type PVC	<b>Add: 500-2.5</b> Cured-In- Place Manhole Rehabilitation	Product: MultiPlexx Liner System by Terre Hill Composites  MultiPlexx Liner System: Type/Model PVC 20-28 ≥ 88 mils consisting of :  PVC Liner: 20 mils PVC  Polyester Fleece Backing: 10 oz/yd <sup>2</sup>  Fiberglass Backing: 18 oz/yd <sup>2</sup>  Resin: EPON 9215 at 0.0005 gallons per square foot of manhole area  Epoxy: Application to substrate surface of manhole to be rehabilitated.	Manufacturing Plant Site: Terre Hill Composites, Division of Terre Hill Concrete Products, Terre Hill, Pennsylvania  Resin: Manufactured by Resolution Performance Products  Installers: Tejon Constructors, Inc.
(9) Raven 405 Epoxy Lining System	<b>Add: 500-</b>	Product: Raven 405 Epoxy Liner System by Raven Lining Systems, Inc. Raven 405 is a solvent-free 100% solids, extra high-build epoxy which can be applied over 200 mils in a single application. Light blue is the standard color when applied. Theoretical coverage averages 40 ft <sup>2</sup> per gallon at 40-mil thickness.  Product shall be applied by an applicator approved and certified by Raven Lining Systems.	Raven 405 Epoxy is manufactured by Raven Lining Systems, Inc. Plant is located at 1024 North Lansing Avenue, Tulsa, Oklahoma 74106
<b>M. Miscellaneous</b>			
(1) Flexible Couplings		Smith-Blair 441 Rockwell APAC (331, 323, 335), (CDC-EC) DFW Plastics, Inc.	
(2) Transition Gaskets	ASTM D 1869	Newby Rubber, Inc.	
(3) High-Deflection Couplings 4 thru 12 inches diameter		Certainteed	
(4) Flexible Saddles (Wye)		DFW Plastics, Inc.	
<p>* References are to the 2000 Edition of the Standard Specifications for Public Works Construction and the latest versions of the ASTM Specifications.</p> <p>2. A limitation is placed on the sealing and bonding methods and processes for lateral connections of the pipe rehabilitation methods included in this list. The limitation will continue on each method until a proven, permanent sealing and bonding method compatible with the liner material and having structural integrity equal to the liner material is available. In the interim period the city will determine the sealing and bonding method of its choice for laterals on City projects. For projects where no lateral connections are needed, this limitation may not apply.</p>			